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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,841	10/29/2003	Toshinobu Ogatsu	Q76863	2499

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WASHINGTON, DC 20037

EXAMINER
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FULLER, RODNEY EVAN

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/694,841

Applicant(s)

OGATSU, TOSHINOBU

Examiner

Rodney E. Fuller

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 16-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 and 16-19 is/are allowed.
- 6) ☒ Claim(s) 10-13 and 20-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

RODNEY FULLER  
PRIMARY EXAMINER

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on November 7, 2005 has been entered.

### ***Remarks***

2. Claims 1-13 and 16-19 were allowed in the Notice of Allowability mailed August 19, 2005. In the Amendment, dated November 7, 2005, the applicant added claims 20-29. Claims 1-13 and 16-29 are pending.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 10-13, 20-25 and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Binnard (US 6,731,372).

Regarding claims 20 and 27, Binnard discloses "a fixed base (Fig 2A, ref.# 18; Fig. 3, ref.# 124); a movable base (Fig. 2A, ref.# 86) disposed so as to move in a vertical direction with respect to the fixed base; a pressing device (Fig. 2A, ref.# 16) fixed on the fixed base, said pressing device pressing the movable base; wherein the pressing device comprises a cylinder (Fig. 2A, ref.# 18) which is fixed on the fixed base and has a main pressurizing chamber (Fig. 2A, ref.# 42) and a sub-pressurizing chamber (ref.# 48), a piston rod (Fig. 2A, ref.# 16) which has a first part (Fig. 2A, ref.# 20) and a second part (Fig. 2A, ref.# 24) vertically moving in the main pressurizing chamber and the sub-pressurizing chamber, respectively, a main pressure controller (Fig. 2A ref.# 74) controlling a pressure in the main pressurizing chamber, and a sub pressure controller (Fig. 2A, ref.# 74) controlling a pressure in the sub-pressurizing chamber."

Regarding claims 21 and 28, Binnard discloses "a detector (column 10, line – column 11, line 4; column 11, lines 34-41, 53-59) which detects a position of the movable base and a controller which controls the pressing device."

Regarding claims 22 and 29, Binnard discloses "a contact detection device (column 10, line – column 11, line 4; column 11, lines 34-41, 53-59) which detects contact between a probe and the movable base or a wafer on the movable base."

Regarding claim 23, Binnard discloses "a sensor base so as to move in a vertical direction with respect to the fixed base, a position sensor which detects a vertical

position of the sensor base, and a driving device which drives the sensor base in the vertical direction.” (column 10, line – column 11, line 4; column 11, lines 34-41, 53-59)

Regarding claim 24, Binnard discloses “a guiding device (Fig. 2A, ref.# 85) which guides the movable device to move in a vertical direction with respect to the fixed base.”

Regarding claim 25, Binnard discloses “a plurality of pressing devices (Fig. 3, ref.# 20, 24, 114; column 8, lines 31-34).”

The method steps of claims 10-13 are met by the construction and/or operation of the apparatus set forth in claims 20-25.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Binnard, et al. (US 6,731,372) in view of Wakui, et al. (US 6,473,159).

Binnard discloses wherein the driving device may be a linear motor (column 13, lines 13-18). However, Binnard does disclose “wherein the driving device comprises a ball screw and a rotary motor.” Wakui teaches that a “rotary motor or a ball screw” may be used in place of a linear motor. (See Wakui, column 11, lines 27-29). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a ball screw and a rotary motor as the driving device. The ordinary artisan would

have been motivated to modify Binnard in the manner described above to reduce vibrations and help support the weight of the movable base as taught by Wakui (See column 11, lines 24-27)

***Allowable Subject Matter***

7. Claims 1-9 and 16-19 are allowed.
8. Claims 1-9 and 16-19 were indicated allowable in the Notice of Allowability mailed August 19, 2005.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Nishi (US 6,894,449), Janssen, et al. (US 6,597,429), Cuijpers, et al. (US 6,473,161) and Hayashi (US 6,036,162) each disclose "a fixed base; a movable base disposed so as to move in a vertical direction with respect to the fixed base; a pressing device fixed on the fixed base, said pressing device pressing the movable base; wherein the pressing device comprises a cylinder which is fixed on the fixed base and has a main pressurizing chamber and a sub-pressurizing chamber, a piston rod which has a first part and a second part vertically moving in the main pressurizing chamber and the sub-pressurizing chamber, respectively, a main pressure controller controlling a pressure in the main pressurizing chamber, and a sub pressure controller controlling a pressure in the sub-pressurizing chamber."

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E. Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney E Fuller  
Primary Examiner  
Art Unit 2851



January 19, 2006